UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,407	02/13/2002	Mario Meggiolan	Q68505	3981

3624 7590 06/06/2003

VOLPE AND KOENIG, P.C.
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER
STAICOVICI, STEFAN

ART UNIT	PAPER NUMBER
1732	8

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/073,407	MEGGIOLAN, MARIO	
	Examiner	Art Unit	
	Stefan Staicovici	1732	

-- The MAILING DATE of this c mmunication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *32-39* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,17-31 and 40* is/are rejected.

7)☒ Claim(s) *13-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *February 13, 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the inventions 'are so inter-related as to require a same filed of search" and as such "no serious burden exists" (see page 2 of the Restriction reply filed March 28, 2003). This is not found persuasive because under MPEP § 803 a restriction requirement is deemed appropriate if two conditions are met:

(a) the inventions are distinct as claimed; and

(b) a serious burden is placed on the Examiner.

As shown in the restriction requirement mailed February 24, 2003 (Paper No. 4):

(a) the product as claimed can be made by another and materially different process such as compressing a compressible mold to apply a pressure to a body within the mold instead of expanding a core to apply a pressure within a rigid mold. It is submitted that it has been shown that the inventions of Groups I and II are distinct, and;

(b) the inventions of Group I and II have acquired a separate status in the art as shown by their different classification and as such would require a different field of search. It is submitted that a different field of search places a serious burden on the Examiner.

The requirement is still deemed proper and is therefore made **FINAL**.

Claim Objections

2. Claims 1-31 and 40 are objected to because of the following informalities:

- in claim 1, line 4, it is suggested to replace "it" with --the method--;

- in claim 1, line 16, after "mould", it is suggested to insert --,--;

- in claim 4, line 2, it is suggested to use Markush group language by replacing "among" with -- from the group consisting of--;

-in claim 11, lines 2-3, it is suggested to delete "of the type";

-in claim 17, line 4, after "and", "ore" should be replaced with --or--;

-in claim 24, line 4, it is suggested that the thermal dilation coefficient exceeds $5x10^{-5}$ mm/°C.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "the tubular body" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4-6, 20-23, 28, 30-31 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Nelson *et al.* (US Patent No. 6,340,509 B1).

Regarding claims 1 and 4-6, Nelson *et al.* ('509) teach the claimed process of molding a connector element for a bicycle frame including, providing a mandrel core (225), covering said mandrel core (225) with a bladder (227) to form an expandable core (241), wrapping said expandable core (241) with resin pre-impregnated fiber reinforced plies/performs to form a wrapped assembly (242), placing said wrapped assembly (242) into a mold cavity defined by a top mold half (245) and a bottom mold half (243), expanding said expandable core (241) to compact said plies/performs against said cavity, heat said mold to cure said resin and form said connector element for a bicycle frame removing said molded connector element for a bicycle frame (see col. 10, line 63 through col. 11, line 18; col. 11, line 62 through col. 12, line 16; col. 13, lines 14-23 and 55-65; col. 14, lines 1-15; col. 14, line 62 through col. 15, line 15 and col. 16, lines 20-50).

In regard to claims 4-6, Nelson *et al.* ('509) teach an epoxy (thermosetting) pre-impregnated carbon fiber material (see col. 13, lines 33-37) that cures at a temperature of about 300 °F (150 °C).

Specifically regarding claims 20-23, Nelson *et al.* ('509) teach an expandable core having an expandable bladder (227) covering a core, said core including a cylindrical main body and

branches extending from said main cylindrical body (see Figure 7A). Further, Nelson *et al.* ('509) teach wrapping said expandable core with a plurality of plies/performs that extend around the expandable core (see Figure 11) such as to fully cover said core. Furthermore, Nelson *et al.* ('509) teach reinforcing high stress areas by placing additional plies/preforms at said areas (enlarged diameter and increases thickness at selected locations) (see col. 13, lines 14-54) while accommodating said branches extending from said main cylindrical body.

Regarding claim 28, Nelson *et al.* ('509) teach an expandable core having an expandable bladder (227) covering a core, said core including a cylindrical main body and separate branches extending from said main cylindrical body (see Figure 7A).

In regard to claims 30 and 31, Nelson *et al.* ('509) teach a connector element for a bicycle frame that permits connection of frame tubes converging towards each other (see Figures 4, 4A and 4B).

Specifically regarding claim 40, Nelson *et al.* ('509) teach radial expansion of said expandable core (241) (see col. 10, line 63 through col. 11, line 18; col. 11, line 62 through col. 12, line 16; col. 13, lines 14-23 and 55-65; col. 14, lines 1-15; col. 14, line 62 through col. 15, line 15 and col. 16, lines 20-50).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2-3 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson *et al.* (US Patent No. 6,340,509 B1) in view of Nelson *et al.* (US Patent No. 5,534,203).

Nelson *et al.* ('509) teach the basic claimed process as described above.

Regarding claim 2, Nelson *et al.* ('509) do not teach that expansion of said expandable core and heating of said mold occurs simultaneously. Nelson *et al.* ('203) teach a molding process using an expandable core that is expanded simultaneously with heating of a mold (see col. 25, lines 1-15). Therefore, it would have been obvious for one of ordinary skill in the art to have simultaneously heated the mold and expanded the core as taught by Nelson *et al.* ('203) in the process of Nelson *et al.* ('509) because, Nelson *et al.* ('203) specifically teach that simultaneously heating the mold and expanding the core has the effect of working and kneading the preform outwards against the walls of the mold cavity, hence providing for an improved molded product without wrinkles.

In regard to claim 3, Nelson *et al.* ('509) do not teach cooling of the mold. Nelson *et al.* ('203) teach that that removing the molded object after the mold has been cooled is an equivalent alternative to removing the molded object from the mold when the mold is still hot (see col 25, lines 27-29). Therefore, it would have been obvious for one of ordinary skill in the art to have cooled the mold first before removing the molded article as taught by Nelson *et al.* ('203) in the process of Nelson *et al.* ('509) because Nelson *et al.* ('203) specifically teach that removing the molded object after the mold has been cooled is an equivalent alternative to removing the

molded object from the mold when the mold is still hot and also because, by removing the molded object after cooling the mold safety requirements are less stringent and work accidents are less likely to occur. Further, it should be noted that Nelson *et al.* ('509) teach a mold having cooling lines (see col. 15, lines 47-48), hence suggesting cooling of the mold.

Specifically regarding claims 7 and 8, Nelson *et al.* ('509) do not teach a specific molding time. However, Nelson *et al.* ('509) teach that the pressure time, the amount of pressure and the time and extent of the heating of the mold are process variables that are optimized. Hence, it is submitted that the heating time is a result-effective variable because it is optimized and also because it determines the curing of the resin (see col. 15, lines 26-38). In re Anonie, 559F.2d 618, 195 USPQ 6 (CCPA 1977). Further, Nelson *et al.* ('203) teach a heating time of 10 minutes for curing an epoxy resin (see col. 19, line 49). Regarding claim 7, it would have been obvious for one of ordinary skill in the art to have used a heating time of 10 minutes as taught by Nelson *et al.* ('203) in the process of Nelson *et al.* ('509) because Nelson *et al.* ('203) specifically teaches that a heating time of 10 minutes cures an epoxy resin, whereas Nelson *et al.* ('509) teach curing of an epoxy resin. Regarding claim 8, it would have been obvious for one of ordinary skill in the art to have used routine experimentation to determine an optimum heating time ranging from 30 minutes to 3 hours in the process of Nelson *et al.* ('509) in view of Nelson *et al.* ('203) because, Nelson *et al.* ('509) specifically teach that the heating time is a result-effective variable and also because the heating time is determined by the type of resin used.

9. Claims 9-12, 17-19 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson *et al.* (US Patent No. 6,340,509 B1) in view of Castanie *et al.* (US Patent No. 6,290,889 B1).

Nelson *et al.* ('509) teach the basic claimed process as described above.

Regarding claim 9, Nelson *et al.* ('509) do not teach an expandable core having a metallic body covered by an elastomeric material. Castanie *et al.* ('889) teach a molding process including, providing an expandable core including a metallic body (11) covered by an elastomeric layer (10), wrapping a plurality of resin pre-impregnated fiber reinforcement layers (15) to form a wrapped assembly, placing said wrapped assembly in a mold (20) and curing said resin to form a molded article (see col. 5, lines 36-56). Therefore, it would have been obvious for one of ordinary skill in the art to have provided an expandable core including a metallic body covered by an elastomeric layer as taught by Castanie *et al.* ('889) in the process of Nelson *et al.* ('509) because, Castanie *et al.* ('889) specifically teach that such a core provides for an improved molded article by producing accurate internal surfaces and allows for a simplified removal of the core after molding (see col. 2, lines 37-43).

In regard to claims 10-11, Nelson *et al.* ('509) do not teach a specific elastomeric material having a specific thermal dilation coefficient. Castanie *et al.* ('889) teach a silicone elastomer having a thermal dilation coefficient of $40x10^{-5}$ 1/°C and a disintegration temperature of 290 °C. Therefore, it would have been obvious for one of ordinary skill to have provided an expandable core including a metallic body covered by an elastomeric layer having a thermal dilation coefficient of $40x10^{-5}$ 1/°C and a disintegration temperature of 290 °C as taught by

Castanie *et al.* ('889) in the process of Nelson *et al.* ('509) because, Castanie *et al.* ('889) specifically teach that such a core provides for an improved molded article by producing accurate internal surfaces and allows for a simplified removal of the core after molding (see col. 2, lines 37-43).

Specifically regarding claims 12 and 17-19, Nelson *et al.* ('509) do not teach an expandable core having a metallic body covered by an elastomeric material, wherein said metallic body includes a main cylindrical portion and one or more auxiliary cylindrical branches extending from the main portion and wherein said elastomeric material follows the shape of said core by stretching. However, Nelson *et al.* ('509) teach an expandable core having an expandable bladder (227) covering a core by stretching, said core including a cylindrical main body and branches extending from said main cylindrical body (see Figure 7A). Castanie *et al.* ('889) teach a molding process including, providing an expandable core including a metallic body (11) covered by an elastomeric layer (10), wrapping a plurality of resin pre-impregnated fiber reinforcement layers (15) to form a wrapped assembly, placing said wrapped assembly in a mold (20) and curing said resin to form a molded article (see col. 5, lines 36-56). Therefore, it would have been obvious for one of ordinary skill in the art to have provided an expandable core including a metallic body covered by an elastomeric layer by stretching as taught by Castanie *et al.* ('889), said core and elastomeric material including a cylindrical main body and branches extending from said main cylindrical body as taught by Nelson *et al.* ('509) in the process of Nelson *et al.* ('509) because, Castanie *et al.* ('889) specifically teach that such a core provides for an improved molded article by producing accurate internal surfaces and allows for a

simplified removal of the core after molding (see col. 2, lines 37-43). It is submitted that the core in the process of Nelson *et al.* ('509) in view of Castanie *et al.* ('889) must include a metallic cylindrical main body and branches extending from said main cylindrical body in order for the invention of Nelson *et al.* ('509) in view of Castanie *et al.* ('889) to function as described. Further, it should be noted that Nelson *et al.* ('509) teach removing said expandable bladder (227) from the molded article.

Regarding claims 24 and 25, although Nelson *et al.* ('509) teach a silicone material (col. 12, lines 15-16) Nelson *et al.* ('509) do not teach a specific silicone elastomeric material having a specific thermal dilation coefficient and a specific disintegration temperature. Castanie *et al.* ('889) teach a silicone elastomer having a thermal dilation coefficient of $40x10^{-5}$ $1/^{o}C$ and a disintegration temperature of 290 ^{o}C. Therefore, it would have been obvious for one of ordinary skill to have provided an expandable core including a metallic body covered by an elastomeric layer having a thermal dilation coefficient of $40x10^{-5}$ $1/^{o}C$ and a disintegration temperature of 290 ^{o}C as taught by Castanie *et al.* ('889) in the process of Nelson *et al.* ('509) because, Castanie *et al.* ('889) specifically teach that such a core provides for an improved molded article by producing accurate internal surfaces and allows for a simplified removal of the core after molding (see col. 2, lines 37-43) and also because Nelson *et al.* ('509) specifically teach a silicone material.

10. Claims 1, 30-31 and 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buxton *et al.* (US Patent No. 4,683,099) in view of Nelson *et al.* (US Patent No. 6,340,509 B1).

Buxton *et al.* ('099) teach the basic claimed process including, providing an expandable mold (10), applying a plurality of resin pre-impregnated fiber reinforced plies (11) about said expandable mandrel (10) to form a wrapped assembly, placing said wrapped assembly in a mold cavity (13), increasing the temperature of the mold such that the mandrel (10) expands and compresses said resin pre-impregnated fiber reinforced plies (11) against said mold cavity (13), curing of the resin and removing said expandable mandrel (10) so as to obtain a hollow tube (see col. 2, lines 4-66 and Figure 1).

Regarding claims 1, 30 and 31, although Buxton *et al.* ('099) teach a hollow composite article, Buxton *et al.* ('099) does not specifically teach a connector element for a bicycle frame. Nelson *et al.* ('509) teach a process of molding a connector element for a bicycle frame including, providing a mandrel core (225), covering said mandrel core (225) with a bladder (227) to form an expandable core (241), wrapping said expandable core (241) with resin pre-impregnated fiber reinforced plies/performs to form a wrapped assembly (242), placing said wrapped assembly (242) into a mold cavity defined by a top mold half (245) and a bottom mold half (243), expanding said expandable core (241) to compact said plies/performs against said cavity, heat said mold to cure said resin and form said connector element for a bicycle frame removing said molded connector element for a bicycle frame (see col. 10, line 63 through col. 11, line 18; col. 11, line 62 through col. 12, line 16; col. 13, lines 14-23 and 55-65; col. 14, lines 1-15; col. 14, line 62 through col. 15, line 15 and col. 16, lines 20-50). Therefore, it would have been obvious for one of ordinary skill in the art to have molded a connector element for a bicycle frame as taught by Nelson *et al.* ('509) by the process of Buxton *et al.* ('099) because, Buxton *et*

al. ('099) teach a hollow composite article, Nelson *et al.* ('509) teach that a connector element for a bicycle frame is a hollow composite article and also because, Buxton *et al.* ('099) specifically teach that the expandable mandrel of its process provides an improved molded article over a silicone rubber expansion molding method which is taught by the process of Nelson *et al.* ('509) (see col. 1, lines 23-30 of Buxton *et al.* ('099)).

Specifically regarding claim 40, Buxton *et al.* ('099) teach radial expansion of said expandable core (10)

11. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buxton *et al.* (US Patent No. 4,683,099) in view of Nelson *et al.* (US Patent No. 6,340,509 B1) and in further view of Miller *et al.* (US Patent no. 4,039,490).

Buxton *et al.* ('099) in view of Nelson *et al.* ('509) teach the basic claimed process as described above.

Regarding claims 24 and 25, although Buxton *et al.* ('099) teach that Teflon has a continuous temperature resistance of up to 330 °C, the process of Buxton *et al.* ('099) in view of Nelson *et al.* ('509) do not teach a specific thermal dilation coefficient. Miller *et al.* ('490) teach that the thermal dilation coefficient of Teflon is $12x10^{-5}$ 1/°C (see col. 2, lines 53-55). Therefore, it would have been obvious for one of ordinary skill in the art to have provided a Teflon material having a thermal dilation coefficient of $12x10^{-5}$ 1/°C as taught by Miller *et al.* ('490) in the process of Buxton *et al.* ('099) in view of Nelson *et al.* ('509) because, Buxton *et al.* ('099) specifically teach the use of Teflon as an expandable mandrel, whereas Miller *et al.* ('490) teach that the thermal dilation coefficient of Teflon is $12x10^{-5}$ 1/°C.

In regard to claims 26 and 27, Buxton *et al.* ('099) specifically teach the use of Teflon as an expandable mandrel (10) (see col. 2, lines 4-5).

12. Claims 1, 29-31 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 57-210820 in view of Nelson *et al.* (US Patent No. 6,340,509 B1).

JP 57-210820 teaches the basic claimed process including, providing an expandable mold having a main body (4) and a plurality of movable sectors (3), applying a plurality of resin pre-impregnated fiber reinforced plies (1) about said expandable sectors (3) to form a wrapped assembly, expanding said expandable sectors (3), curing said resin pre-impregnated fiber reinforced plies (1) and removing said expandable mandrel (10) so as to obtain a hollow tube (see Abstract).

Regarding claim 1 and 30-31, JP 57-210820 does not teach curing in a mold cavity. Nelson *et al.* ('509) teach a process of molding a connector element for a bicycle frame including, providing a mandrel core (225), covering said mandrel core (225) with a bladder (227) to form an expandable core (241), wrapping said expandable core (241) with resin pre-impregnated fiber reinforced plies/performs to form a wrapped assembly (242), placing said wrapped assembly (242) into a mold cavity defined by a top mold half (245) and a bottom mold half (243), expanding said expandable core (241) to compact said plies/performs against said cavity, heat said mold to cure said resin and form said connector element for a bicycle frame removing said molded connector element for a bicycle frame (see col. 10, line 63 through col. 11, line 18; col. 11, line 62 through col. 12, line 16; col. 13, lines 14-23 and 55-65; col. 14, lines 1-15; col. 14, line 62 through col. 15, line 15 and col. 16, lines 20-50). Therefore, it would have

been obvious for one of ordinary skill in the art to have molded a connector element for a bicycle frame as taught by Nelson *et al.* ('509) by the process of JP 57-210820 because, JP 57-210820 teach a hollow composite article, Nelson *et al.* ('509) teach that a connector element for a bicycle frame is a hollow composite article and also because, Nelson *et al.* ('509) specifically teach that a mold cavity provides the external shape of said molded connector element for a bicycle frame (see col. 8, lines 58-63 of Nelson *et al.* ('509)).

In regard to claim 29, JP 57-210820 teaches an expandable mold having a main body (4) and a plurality of movable sectors (3) that force a plurality of resin pre-impregnated fiber reinforced plies in a radial direction by using adjusting mechanism (7) (see Figures 2 and 3A).

Specifically regarding claim 40, JP 57-210820 teaches radial expansion of said expandable core (3) and as such teaches radial pressure.

Allowable Subject Matter

13. Claims 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (703) 305-0396. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM and alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino, can be reached at (703) 308-3853. The fax phone number for this Group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Stefan Staicovici, PhD

Primary Examiner 6/4/03

AU 1732

June 4, 2003